

# A TOOTH CONTOUR STRUCTURE FOR LARGE SPROCKET SET OF BICYCLE

## Abstract

A tooth contour structure for large sprocket set of bicycle, at least three characteristic teeth are arranged on the larger sprocket of two adjacent sprockets for the large sprocket set, wherein the right side of the first characteristic tooth has a curve surface and a cutting portion fulfilled with a moving path for a chain, and between the first characteristic tooth and second characteristic tooth a tooth valley bottom edge is a projection butting surface formed by stamping and biased toward the smaller sprocket, and the arc of the top edge for the butting surface is formed according to the path and curvature of the upper chain, and the top edge is also formed into a slant angle, and a recession is arranged below the first characteristic tooth, not only the process is easy; the manufacturing cost is low; the chaining-up path is steady and smooth; the fixed-point shifting can be proceeded; but also the shifting efficiency is raised; the reliability is increased; the usage life is prolonged; and the running noise is lowered.